

Fig. 1. Application of digital thermometer for assessment
of skin thermal response over artery

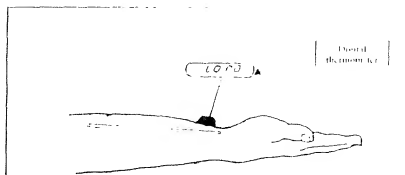


Fig. 2 Correlation between Body Surface Area, BSA(m²),
and Thermal Response of the Skin, dT (°C)

$$r = 0.65$$

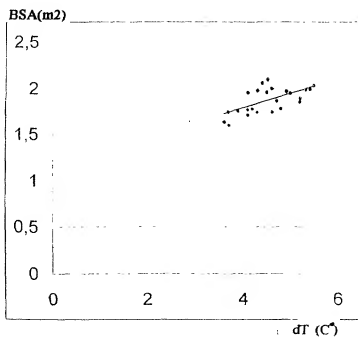


Fig. 3 Correlation between Pulse Pressure:PP
and Thermal Response of Skin, dT

$$r = 0.58$$

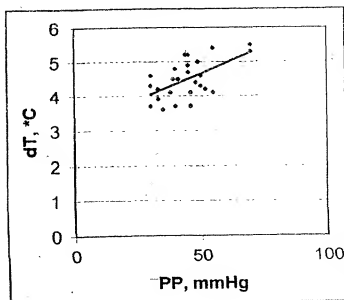
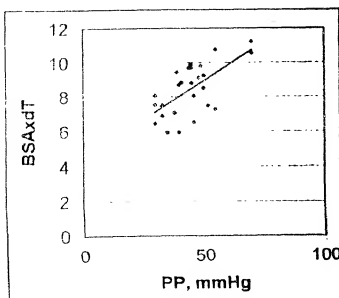


Fig. 4 Correlation between Pulse Pressure:PP
and Body Surface Area BSA multiplied
by Thermal Response of the Skin, dT

$$r = 0.64$$



Newton's law of cooling

$$dQ / dt = \alpha \cdot A \cdot dT$$

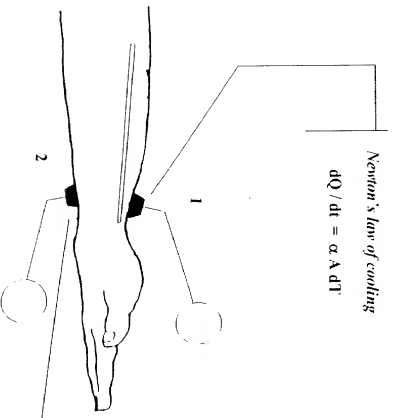


Fig.5. Measurement of the rate of warming of the cold thermometer, placed in two positions - on the skin of the wrist over artery (1) and on the back of the wrist (2).

Fourier's Law of Conduction:

$$dQ / dt = \lambda \cdot A \cdot dT/dx$$